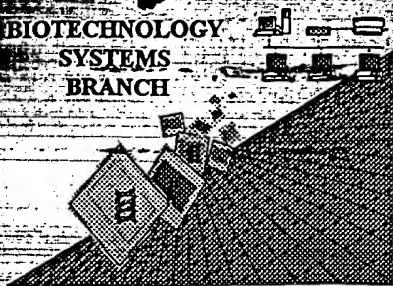


**RAW SEQUENCE LISTING**  
**ERROR REPORT**



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/666,837

Source: O/PF

Date Processed by STIC: 9/29/2000

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR FURTHER INFORMATION, PLEASE TELEPHONE MARK SPENCER, 703-308-4212.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

**Checker Version 3.0**

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:  
<http://www.uspto.gov/web/offices/pac/checker>

OIPE

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/666,837

DATE: 09/29/2000  
 TIME: 13:13:20

Input Set : A:\2314-206.app  
 Output Set: N:\CRF3\09292000\I666837.raw

3 <110> APPLICANT: Cornell-Bell, Ann H.  
 4 Pemberton, Karen E.  
 5 Temple Jr., Davis L.  
 6 Layer, Richard T.  
 7 McCabe, R. Tyler  
 8 Jones, Robert M.  
 9 Cognetix, Inc.  
 11 <120> TITLE OF INVENTION: Uses of Kappa-Conotoxin PVIIA  
 13 <130> FILE REFERENCE: Kappa-PVIIA  
 15 <140> CURRENT APPLICATION NUMBER: US/09/666,837  
 16 <141> CURRENT FILING DATE: 2000-09-21  
 18 <150> PRIOR APPLICATION NUMBER: US 60/219,438  
 19 <151> PRIOR FILING DATE: 2000-07-20  
 21 <150> PRIOR APPLICATION NUMBER: US 60/155,135  
 22 <151> PRIOR FILING DATE: 1999-09-22  
 24 <160> NUMBER OF SEQ ID NOS: 25  
 26 <170> SOFTWARE: PatentIn Ver. 2.0  
 28 <210> SEQ ID NO: 1  
 29 <211> LENGTH: 27  
 30 <212> TYPE: PRT  
 31 <213> ORGANISM: Conus purpurascens  
 33 <220> FEATURE:  
 34 <221> NAME/KEY: PEPTIDE  
 35 <222> LOCATION: (1)..(27)  
 36 <223> OTHER INFORMATION: Xaa at residue 2, 7, 18, 19, 22 and 25 may be Arg,  
 37 homoarginine, ornithine, Lys, N-methyl-Lys,  
 38 N,N-dimethyl-Lys, N,N,N-trimethyl-Lys, any  
 39 synthetic basic amino acid, His or halo-His; Xaa  
 W--> 40 at residue  
 42 <220> FEATURE:  
 43 <221> NAME/KEY: PEPTIDE  
 44 <222> LOCATION: (1)..(27)  
 45 <223> OTHER INFORMATION: 4 may be Pro or Hyp; Xaa at residue 9 and 23 may  
 46 be Phe,Tyr, meta-Tyr, ortho-Tyr, nor-Tyr,  
 47 mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,  
 48 O-phospho-Tyr, nitro-Tyr, Trp (D or L), neo-Trp,  
 50 <220> FEATURE:  
 51 <221> NAME/KEY: PEPTIDE  
 52 <222> LOCATION: (1)..(27)  
 53 <223> OTHER INFORMATION: halo-Trp (D or L) or any synthetic aromatic amino  
 54 acid; Xaa at residue 11 is His or halo-His  
 56 <400> SEQUENCE: 1  
 57 Cys Xaa Ile Xaa Asn Gln Xaa Cys Xaa Gln Xaa Leu Asp Asp Cys Cys  
 58 1 / / 5 / / 10 / / 15  
 60 Ser Xaa Xaa Cys Asn Xaa Xaa Asn Xaa Cys Val  
 61 20 25  
 64 <210> SEQ ID NO: 2

Does Not Comply  
 Corrected Diskette Needed

move up - per sequence Rules,  
 maximum of four lines  
 for <223> section

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/666,837

DATE: 09/29/2000  
TIME: 13:13:20

Input Set : A:\2314-206.app  
Output Set: N:\CRF3\09292000\I666837.raw

65 <211> LENGTH: 27  
66 <212> TYPE: PRT  
67 <213> ORGANISM: Conus purpurascens  
69 <220> FEATURE:  
70 <221> NAME/KEY: PEPTIDE  
71 <222> LOCATION: (1)..(27)  
72 <223> OTHER INFORMATION: Xaa is Hyp  
74 <400> SEQUENCE: 2  
OK 75 Cys Arg Ile Xaa Asn Gln Lys Cys Phe Gln His Leu Asp Asp Cys Cys  
76 1 5 10 15  
78 Ser Ala Lys Cys Asn Arg Phe Asn Lys Cys Val  
79 20 25  
82 <210> SEQ ID NO: 3  
83 <211> LENGTH: 27  
84 <212> TYPE: PRT  
85 <213> ORGANISM: Conus purpurascens  
87 <220> FEATURE:  
88 <221> NAME/KEY: PEPTIDE  
89 <222> LOCATION: (1)..(27)  
90 <223> OTHER INFORMATION: Xaa is Hyp  
92 <400> SEQUENCE: 3  
OK 93 Cys Arg Ile Xaa Asn Gln Lys Cys Phe Gln His Leu Asp Asp Cys Cys  
94 1 5 10 15  
96 Ser Arg Lys Cys Asn Ala Phe Asn Lys Cys Val  
97 20 25  
100 <210> SEQ ID NO: 4  
101 <211> LENGTH: 27  
102 <212> TYPE: PRT  
103 <213> ORGANISM: Conus purpurascens  
105 <220> FEATURE:  
106 <221> NAME/KEY: PEPTIDE  
107 <222> LOCATION: (1)..(27)  
108 <223> OTHER INFORMATION: Xaa is Hyp  
110 <400> SEQUENCE: 4  
OK 111 Cys Arg Ala Xaa Asn Gln Lys Cys Phe Gln His Leu Asp Asp Cys Cys  
112 1 5 10 15  
114 Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
115 20 25  
118 <210> SEQ ID NO: 5  
119 <211> LENGTH: 27  
120 <212> TYPE: PRT  
121 <213> ORGANISM: Conus purpurascens  
123 <220> FEATURE:  
124 <221> NAME/KEY: PEPTIDE  
125 <222> LOCATION: (1)..(27)  
126 <223> OTHER INFORMATION: Xaa is Hyp  
128 <400> SEQUENCE: 5  
OK 129 Cys Arg Ile Xaa Asn Gln Lys Cys Phe Gln His Leu Asp Asp Cys Cys  
130 1 5 10 15

## RAW SEQUENCE LISTING

DATE: 09/29/2000

PATENT APPLICATION: US/09/666,837

TIME: 13:13:20

Input Set : A:\2314-206.app

Output Set: N:\CRF3\09292000\I666837.raw

132 Ser Arg Ala Cys Asn Arg Phe Asn Lys Cys Val  
133 20 25  
136 <210> SEQ ID NO: 6  
137 <211> LENGTH: 27  
138 <212> TYPE: PRT  
139 <213> ORGANISM: Conus purpurascens  
141 <220> FEATURE:  
142 <221> NAME/KEY: PEPTIDE  
143 <222> LOCATION: (1)..(27)  
144 <223> OTHER INFORMATION: Xaa is Hyp  
146 <400> SEQUENCE: 6  
OK-> 147 Cys Ala Ile Xaa Asn Gln Lys Cys Phe Gln His Leu Asp Asp Cys Cys  
148 1 5 10 15  
150 Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
151 20 25  
154 <210> SEQ ID NO: 7  
155 <211> LENGTH: 27  
156 <212> TYPE: PRT  
157 <213> ORGANISM: Conus purpurascens  
159 <220> FEATURE:  
160 <221> NAME/KEY: PEPTIDE  
161 <222> LOCATION: (1)..(27)  
163 <400> SEQUENCE: 7  
W--> 164 Cys Arg Ile Xaa Asn Gln Lys Cys Ala Gln His Leu Asp Asp Cys Cys  
165 1 5 10 15  
167 Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
168 20 25  
171 <210> SEQ ID NO: 8  
172 <211> LENGTH: 27  
173 <212> TYPE: PRT  
174 <213> ORGANISM: Conus purpurascens  
176 <220> FEATURE:  
177 <221> NAME/KEY: PEPTIDE  
178 <222> LOCATION: (1)..(27)  
179 <223> OTHER INFORMATION: Xaa is Hyp  
181 <400> SEQUENCE: 8  
OK-> 182 Cys Arg Ile Xaa Asn Gln Lys Cys Phe Gln His Leu Asp Asp Cys Cys  
183 1 5 10 15  
185 Ser Arg Lys Cys Asn Arg Phe Asn Ala Cys Val  
186 20 25  
189 <210> SEQ ID NO: 9  
190 <211> LENGTH: 27  
191 <212> TYPE: PRT  
192 <213> ORGANISM: Conus purpurascens  
194 <220> FEATURE:  
195 <221> NAME/KEY: PEPTIDE  
196 <222> LOCATION: (1)..(27)  
197 <223> OTHER INFORMATION: Xaa is Hyp  
199 <400> SEQUENCE: 9

*what does Xaa represent?*

## RAW SEQUENCE LISTING

DATE: 09/29/2000

PATENT APPLICATION: US/09/666,837

TIME: 13:13:20

Input Set : A:\2314-206.app

Output Set: N:\CRF3\09292000\I666837.raw

OK -> 200 Cys Lys Ile Xaa Asn Gln Lys Cys Phe Gln His Leu Asp Asp Cys Cys  
201 1 5 10 15  
203 Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
204 20 25  
207 <210> SEQ ID NO: 10  
208 <211> LENGTH: 27  
209 <212> TYPE: PRT  
210 <213> ORGANISM: Conus purpurascens  
212 <220> FEATURE:  
213 <221> NAME/KEY: PEPTIDE  
214 <222> LOCATION: (1)..(27)  
215 <223> OTHER INFORMATION: Xaa is Hyp  
217 <400> SEQUENCE: 10  
OK -> 218 Cys Arg Ile Xaa Asn Gln Ala Cys Phe Gln His Leu Asp Asp Cys Cys  
219 1 5 10 15  
221 Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
222 20 25  
225 <210> SEQ ID NO: 11  
226 <211> LENGTH: 27  
227 <212> TYPE: PRT  
228 <213> ORGANISM: Conus purpurascens  
230 <220> FEATURE:  
231 <221> NAME/KEY: PEPTIDE  
232 <222> LOCATION: (1)..(27)  
233 <223> OTHER INFORMATION: Xaa is Hyp  
235 <400> SEQUENCE: 11  
OK -> 236 Cys Arg Ile Xaa Asn Gln Lys Cys Met Gln His Leu Asp Asp Cys Cys  
237 1 5 10 15  
239 Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
240 20 25  
243 <210> SEQ ID NO: 12  
244 <211> LENGTH: 27  
245 <212> TYPE: PRT  
246 <213> ORGANISM: Conus purpurascens  
248 <220> FEATURE:  
249 <221> NAME/KEY: PEPTIDE  
250 <222> LOCATION: (1)..(27)  
251 <223> OTHER INFORMATION: Xaa is Hyp  
253 <400> SEQUENCE: 12  
OK -> 254 Cys Arg Ile Xaa Asn Gln Lys Cys Tyr Gln His Leu Asp Asp Cys Cys  
255 1 5 10 15  
257 Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
258 20 25  
261 <210> SEQ ID NO: 13  
262 <211> LENGTH: 27  
263 <212> TYPE: PRT  
264 <213> ORGANISM: Conus purpurascens  
266 <220> FEATURE:  
267 <221> NAME/KEY: PEPTIDE

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/666,837

DATE: 09/29/2000

TIME: 13:13:20

Input Set : A:\2314-206.app

Output Set: N:\CRF3\09292000\I666837.raw

268 <222> LOCATION: (1)..(27)  
 269 <223> OTHER INFORMATION: Xaa is Hyp  
 271 <400> SEQUENCE: 13  
 OK> 272 Cys Gln Ile Xaa Asn Gln Lys Cys Phe Gln His Leu Asp Asp Cys Cys  
 273 1 5 10 15  
 275 Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
 276 20 25  
 279 <210> SEQ ID NO: 14  
 280 <211> LENGTH: 27  
 281 <212> TYPE: PRT  
 282 <213> ORGANISM: Conus purpurascens  
 284 <220> FEATURE:  
 285 <221> NAME/KEY: PEPTIDE  
 286 <222> LOCATION: (1)..(27)  
 287 <223> OTHER INFORMATION: Xaa is Hyp  
 289 <400> SEQUENCE: 14  
 OK> 290 Cys Arg Ile Xaa Asn Gln Lys Cys Phe Gln Ala Leu Asp Asp Cys Cys  
 291 1 5 10 15  
 293 Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
 294 20 25  
 297 <210> SEQ ID NO: 15  
 298 <211> LENGTH: 27  
 299 <212> TYPE: PRT  
 300 <213> ORGANISM: Conus purpurascens  
 302 <220> FEATURE:  
 303 <221> NAME/KEY: PEPTIDE  
 304 <222> LOCATION: (1)..(27)  
 306 <400> SEQUENCE: 15  
 W--> 307 Cys Arg Ile Xaa Asn Gln Lys Cys Phe Gln His Leu Asp Ala Cys Cys  
 308 1 5 10 15  
 310 Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
 311 20 25  
 314 <210> SEQ ID NO: 16  
 315 <211> LENGTH: 27  
 316 <212> TYPE: PRT  
 317 <213> ORGANISM: Conus purpurascens  
 319 <220> FEATURE:  
 320 <221> NAME/KEY: PEPTIDE  
 321 <222> LOCATION: (1)..(27)  
 322 <223> OTHER INFORMATION: Xaa is Hyp  
 324 <400> SEQUENCE: 16  
 OK> 325 Cys Arg Ile Xaa Asn Ala Lys Cys Phe Gln His Leu Asp Asp Cys Cys  
 326 1 5 10 15  
 328 Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
 329 20 25  
 332 <210> SEQ ID NO: 17  
 333 <211> LENGTH: 27  
 334 <212> TYPE: PRT  
 335 <213> ORGANISM: Conus purpurascens

*what does Xaa represent?*

*FYI*  
↓

**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

## VERIFICATION SUMMARY

DATE: 09/29/2000

PATENT APPLICATION: US/09/666,837

TIME: 13:13:21

Input Set : A:\2314-206.app

Output Set: N:\CRF3\09292000\I666837.raw

L:15 M:270 C: Current Application Number differs, Replaced Application Number  
L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:40 M:259 W: Field exceeds allowed number of lines, <223> Other Information:  
L:57 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:60 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:75 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:93 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:111 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:129 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
L:147 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
L:164 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:7  
L:164 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:7  
L:182 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:200 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9  
L:218 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10  
L:236 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11  
L:254 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12  
L:272 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13  
L:290 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14  
L:307 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:15  
L:307 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:15  
L:325 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16  
L:343 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17  
L:361 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18  
L:379 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19  
L:396 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:20  
L:396 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:20  
L:414 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21  
L:432 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22  
L:450 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23  
L:481 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25